

## ABSTRACT OF THE DISCLOSURE

The present invention provides an x-ray source including an electron-generation chamber with an electron beam source that emits electrons and a target chamber with a support structure and a target positioned within the support structure. The emitted electrons travel in a direction substantially parallel to a longitudinal axis extending between the electron-generation chamber and the target chamber towards the target and bombard the target to generate x-rays. The target is movable, while being bombarded with electrons, with respect to the support structure in at least one direction perpendicular to a longitudinal axis.